

***EURYTHRIPS AND TERTHROTHRIPS (THYSANOPTERA:
PHLAEOTHIRIPIDAE) FROM SOUTHERN BRAZIL,
WITH ONE NEW SPECIES,
NEW COLLECTION SITES,
AND KEY***

CHARLES F. GERDES

Division of Science, Northeast Missouri State University, Kirksville, Missouri
63501.

Abstract.—A new species of Phlaeothripidae, *Terthrotrips marginatus*, is described and illustrated. A key to the new species and 8 allied species, all from new collection sites, is presented. These are the first new records for the 8 allied species since their original descriptions. *Plemmelothrips* is a new synonym of *Terthrotrips*.

Hood (1950, 1952, 1954, 1957, 1960) described 78 species of litter thrips in the tribe Glyptothripini, family Phlaeothripidae, from southern Brazil (below 22° South latitude). Sixty-six species were based exclusively on type-series collected from Nova Teutonia, Santa Catarina, while five species were based on type-series from both Nova Teutonia and Erechim, Rio Grande do Sul. The remaining seven species were based on material from six sites in three States: Rio de Janeiro, Rio Grande do Sul, and São Paulo. The only other species from southern Brazil in this tribe was described by Bergroth (1896) from Santa Catarina. This paper reports a new species and new records for 8 species in the Glyptothripini from Seara and Concordia, Santa Catarina. The species belong in the genera *Eurythrips* and *Terthrotrips*, which were considered closely related by Stannard (1957) and Mound (1977). The eight species were recorded previously only from Nova Teutonia by Hood (1954, 1957). No other records from southern Brazil have been added to these two genera since Hood (1960).

The 236 Seara specimens comprising the eight species were collected in January 1960, while 466 type specimens of the same species from Nova Teutonia were collected from August 1952 to October 1955 for *Eurythrips* and from February 1953 to October 1955 for *Terthrotrips*. However, none of the Nova Teutonia specimens were collected in December, January or March, and no specimens from these months could be found among unidentified material in the Hood collection. Therefore, the Seara additions greatly increase the known material during austral summer. The two Concordia specimens were collected in October 1959. Macrop-terous and brachypterous forms were collected in all seasons at Nova Teutonia, but at both Nova Teutonia and Seara the brachypterous form predominated. In this respect the similarity of forms would indicate that no drastic microclimatic difference existed. However, many of Hood's species exclusively from Nova Teu-

tonia were found only in certain seasons or were known only from brachypterous or macropterous forms. Also, many of these species were based on general shape of body parts, color, and reticulation.

Hinds (1902) established *Eurythrips* for two species from Massachusetts. He was impressed by the dimensions of the head capsule and antennae. The former was described "as long or somewhat longer than wide" and the antennae were "fully twice as long as the head and thicker than in most species." Karny (1925) erected *Terthrothrips* for *Phloeothrips sanguinolentus* Bergroth (1896) from southern Brazil. Hood (1935) described *Terthrothrips* as having a "head decidedly longer than broad" and antennae "unusually long and slender, 2.7 to 3.3 times as long as head." Stannard (1955, 1957) published keys and descriptions to genera of Glyptothripini, and he stated in 1957 that total antennal length was the criterion for separation of *Eurythrips* and *Terthrothrips*. Species with each antenna shorter than 2½ times the head capsule length were placed in *Eurythrips* while species exceeding this value were placed in *Terthrothrips*. Mound (1977) separated *Eurythrips* and *Terthrothrips* in a key to genera by the characters of the fore tibiae and head. *Eurythrips* lacked small tubercles on the fore tibiae and had a variable head shape; *Terthrothrips* had small tubercles frequently present and a relatively long head with curved cheeks deeply incut behind large eyes. Mound (1977, fig. 58) implied that antennal length was also important in the separation of these two genera. I agree with Mound (1977) who stated that "the short-headed *Eurythrips* forms are so different from the long-headed *Terthrothrips* forms that it seems useful to recognize two genera" although a few species have characteristics of both genera.

Hood (1935) published a key to *Terthrothrips* species that contained only three species, one of which was transferred later to another genus. The most recent key to *Eurythrips* species was by Mound (1976). After examination of the type series of these two genera in the New World the two antennal lengths and four new ratios in couplet 1 of the following key are presented especially to aid in separating closely related species of *Terthrothrips*, none of which was in Hood's 1935 key.

KEY TO SPECIES OF *EURYTHRIPS* AND *TERTHROTHRIPS*
FROM SOUTHERN BRAZIL

- 1. In both sexes, usually head capsule long, eyes large, width across eyes similar to or slightly greater than width across cheeks, fore tibia with small tubercles along inner margin. Female antennal segment III at least 80 μ long, IV at least 75 μ long. Female ratios of body parts equal to or greater than following: antennal segments III and IV each with length/width, 1.75; abdominal segment X, length/basal width, 1.90; same segment, length/distal width, 3.70 *Terthrothrips* Karny 2
- In both sexes, usually head capsule short, eyes small, width across eyes less than across cheeks, fore tibia without small tubercles along inner margin. Female antennal segment III shorter than 80 μ, IV shorter than 75 μ. Female ratios less than values given in alternative above *Eurythrips* Hinds 8
- 2. Antennal segments III-VIII light yellow, almost no difference in shades. Abdominal segment II yellow 3

- Two or more of antennal segments III–VII brownish. Abdominal segment II yellow or brown 4
- 3. Head with distinct reticulated striation completely across area posterior to major postocular setae. Maxillary stylets inserted only to posterior edge of head capsule. Metanotal pelta with 6–9 longitudinally elongated polygons between central setae *Terthrothrips irretitus* Hood
- Head with sparse weak striation in area posterior to major postocular setae. Maxillary stylets inserted $\frac{1}{3}$ of distance from posterior edge of head capsule to major postocular setae. Metanotal pelta with 4–5 roughly quadrate polygons between central setae in brachyptera, more polygons in macroptera *Terthrothrips balteatus* Hood
- 4. Abdominal segment II yellow, IV brown, no sharp contrast in shade between II and IV 5
- Abdominal segments II and IV brown, II slightly lighter in shade than IV 6
- 5. Metanotal pelta with distinct dark posterior margins; without complete posterior extension, only a few weak striae between dark margins. Maxillary stylets inserted $\frac{1}{3}$ of distance from posterior edge of head capsule to major postocular setae *Terthrothrips marginatus*, new species
- Metanotal pelta without dark posterior margins; with narrow posterior extension, polygons of extension elongated and unusually small. Maxillary stylets inserted $\frac{1}{3}$ – $\frac{3}{4}$ of distance from posterior edge of head capsule to major postocular setae *Terthrothrips bucculentus* Hood
- 6. Maxillary stylets inserted $\frac{1}{3}$ of distance from posterior edge of head capsule to major postocular setae. Fore femur and tibia brownish, slightly lighter than brown head capsule. Metanotal pelta with posterior extension, each polygon of extension similar in length and width; with heavy ridges just lateral to central setae *Terthrothrips brunneus* Hood
- Maxillary stylets inserted $\frac{1}{2}$ – $\frac{3}{4}$ of distance from posterior edge of head capsule to major postocular setae. Fore tibia and distal $\frac{1}{2}$ of fore femur yellow, head capsule brown. Metanotal pelta without posterior extension, without heavy ridges lateral to central setae 7
- 7. Antennal segment III light yellow medially, V light brown medially. Metanotal pelta with 5 polygons between central setae, each central seta $\frac{3}{4}$ as long as distance between them, more polygons in microptera and brachyptera *Terthrothrips peltatus* Hood
- Antennal segments III and V light brown medially, almost same shade. Metanotal pelta with 8 polygons between central setae, each central seta $\frac{1}{2}$ as long as distance between them *Terthrothrips defectus* (Hood)
- 8. Antennal segment IV with 2 sense cones on inner $\frac{1}{2}$. Metanotal pelta with broad posterior extension of longitudinally elongated polygons *Eurythrips trifasciatus* (Hood)
- Antennal segment IV with 1 sense cone on inner $\frac{1}{2}$. Metanotal pelta without posterior extension 9
- 9. Abdominal tergite II striated between submedial anterior pair of setae. Abdominal segment VIII with male glandular area a narrow band across anterior end *Eurythrips bisetosus* (Hood)
- Abdominal tergite II smooth between submedial anterior pair of setae.

Abdominal segment VIII with male glandular area occupying most of segment *Eurythrips hemimeres* Hood

DISCUSSION OF SPECIES

All specimens listed as new records are in the Illinois Natural History Survey, Champaign. Abbreviations are: mac = macropterous, br = brachypterous.

Eurythrips bisetosus (Hood)

Porcothrips bisetosus Hood, 1954: 35–38.

Eurythrips bisetosus: Mound, 1976: 31, 38, 42, 45, 49; Mound, 1977: 227, 239, 241.

New record.—Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, Fritz Plaumann coll., 37 br ♀, 14 br ♂.

Mound (1976) regarded *E. bisetosus* as closely related to *E. hemimeres* and keyed them out at the same couplet but did not use the striation pattern of abdominal tergite II (present key, couplet 9) which was described by Hood (1957).

Eurythrips hemimeres Hood

Eurythrips hemimeres Hood, 1957: 142; Mound, 1976: 31, 38, 42, 49, 53; Mound, 1977: 227, 234, 241.

New record.—Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, Fritz Plaumann coll., 1 mac ♀, 44 br ♀, 26 br ♂.

Mound (1976) pointed out that *E. hemimeres* was the most abundant species collected by F. Plaumann in southern Brazil. Actually, all 155 specimens were from Nova Teutonia. The 71 Seara specimens also represented the most abundant species from that site.

Eurythrips trifasciatus (Hood)

Porcothrips (?) *trifasciatus* Hood, 1954: 38–39.

Eurythrips trifasciatus: Mound, 1976: 32, 39–40, 44, 59–60; Mound, 1977: 229, 234, 241.

New records.—Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, Fritz Plaumann coll., 15 mac ♀, 2 br ♂; Santa Catarina, Concordia, October 1959, Fritz Plaumann coll., 1 mac ♀.

This species was described from 1 micropterous female, but Mound (1976) reported that the macropterous form was in Hood's material. Hood's collection at the U.S. National Museum included 34 unidentified macropterous females grouped with the type series and from Nova Teutonia. Hood apparently believed they were the same species. The high proportion of macroptery is unusual for *Eurythrips*. All 15 Seara females had the short *Eurythrips*-like antennal segments III and IV, which were less than 80 μ and 75 μ long, respectively. The average head width across the eyes for the Seara females was 93.5% of the width across the cheeks, which was near typical *Terthrothrips* values. However, macropterous forms of *Terthrothrips* tend to have head widths across the eyes relatively greater, with some specimens having this width greater than across the cheeks. Fourteen females had the tube length/basal width ratio falling in the *Eurythrips* range.

However, the majority of specimens fell in the *Terthrothrips* range using the other 3 ratios of couplet 1. Brachypterous males are reported here for the first time.

***Terthrothrips balteatus* Hood**

Terthrothrips balteatus Hood, 1957: 152; Mound, 1976: 32; Mound, 1977: 227, 233, 237, 242.

New record.—Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, Fritz Plaumann coll., 4 mac ♀, 16 br ♀, 8 br ♂.

Hood (1957) stated that *T. balteatus* was "the only species of the genus with blackish brown body, yellow second abdominal segment, and yellow antennae." Hood clarified in the detailed description that antennal segments I and II were not yellow. *Terthrothrips irretitus* possesses a yellow second abdominal segment and yellow antennal segments III–VIII (couplet 2) but is distinctive in the characters in couplet 3.

***Terthrothrips brunneus* Hood**

Terthrothrips brunneus Hood, 1957: 148–149; Mound, 1976: 32, 62; Mound, 1977: 242.

New record.—Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, Fritz Plaumann coll., 3 mac ♀, 5 br ♀, 4 br ♂.

This is the first record of males in this species. The 4 males were oedymorous, having moderately enlarged fore femora and tibiae. Brachypterous females are also recorded here for the first time.

***Terthrothrips bucculentus* Hood**

Terthrothrips bucculentus Hood, 1957: 145–146; Mound, 1976: 32, 62; Mound, 1977: 227, 242.

New record.—Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, Fritz Plaumann coll., 2 mac ♀, 1 br ♂.

Hood (1957) recorded 138 specimens of this species from Nova Teutonia but only 3 specimens were found at Seara.

***Terthrothrips defectus* (Hood), NEW COMBINATION**

Plemmelothrips defectus Hood, 1957: 144–145.

Eurythrips defectus: Mound, 1977: 227, 234, 241.

New record.—Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, Fritz Plaumann coll., 6 mac ♀, 5 br ♀, 6 br ♂.

Hood (1957) stated that *Plemmelothrips* was allied to *Terthrothrips* but that the former had stouter antennae, a short and broad head, and less protruding eyes. *Plemmelothrips* is a monotypic genus and a new synonym here of *Terthrothrips*. Mound (1977) stated that *P. defectus* was intermediate in structure between *Eurythrips* and *Terthrothrips* but did not indicate the characters he considered. All the Seara females had the 2 tube ratios of couplet 1 in the *Terthrothrips* range but a few of the antennal ratios fell in the *Eurythrips* range. However, the lengths of antennal segments III and IV were completely in the *Terthrothrips* range, agreeing with the Nova Teutonia material. Interestingly, the holotype had each antenna 2.6 times as long as the head capsule, agreeing with the concept of

Stannard (1957) that antennae longer than $2\frac{1}{2}$ times the head capsule length were typical of *Terthrothrips*.

Terthrothrips irretitus Hood

Terthrothrips irretitus Hood, 1957: 150–151, 153; Mound, 1976: 32, 62; Mound, 1977: 227, 233, 237, 239, 242.

New records.—Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, Fritz Plaumann coll., 3 mac ♀; Santa Catarina, Concordia, October 1959, Fritz Plaumann coll., 1 mac ♀.

The Seara and Concordia specimens agree with the Nova Teutonia material in having maxillary stylets inserted only to the posterior edge of the head capsule (Mound, 1977, fig. 13). This is an unusual character state for *Terthrothrips* but works well in separating species in the key (couplet 3).

Terthrothrips marginatus Gerdes, NEW SPECIES

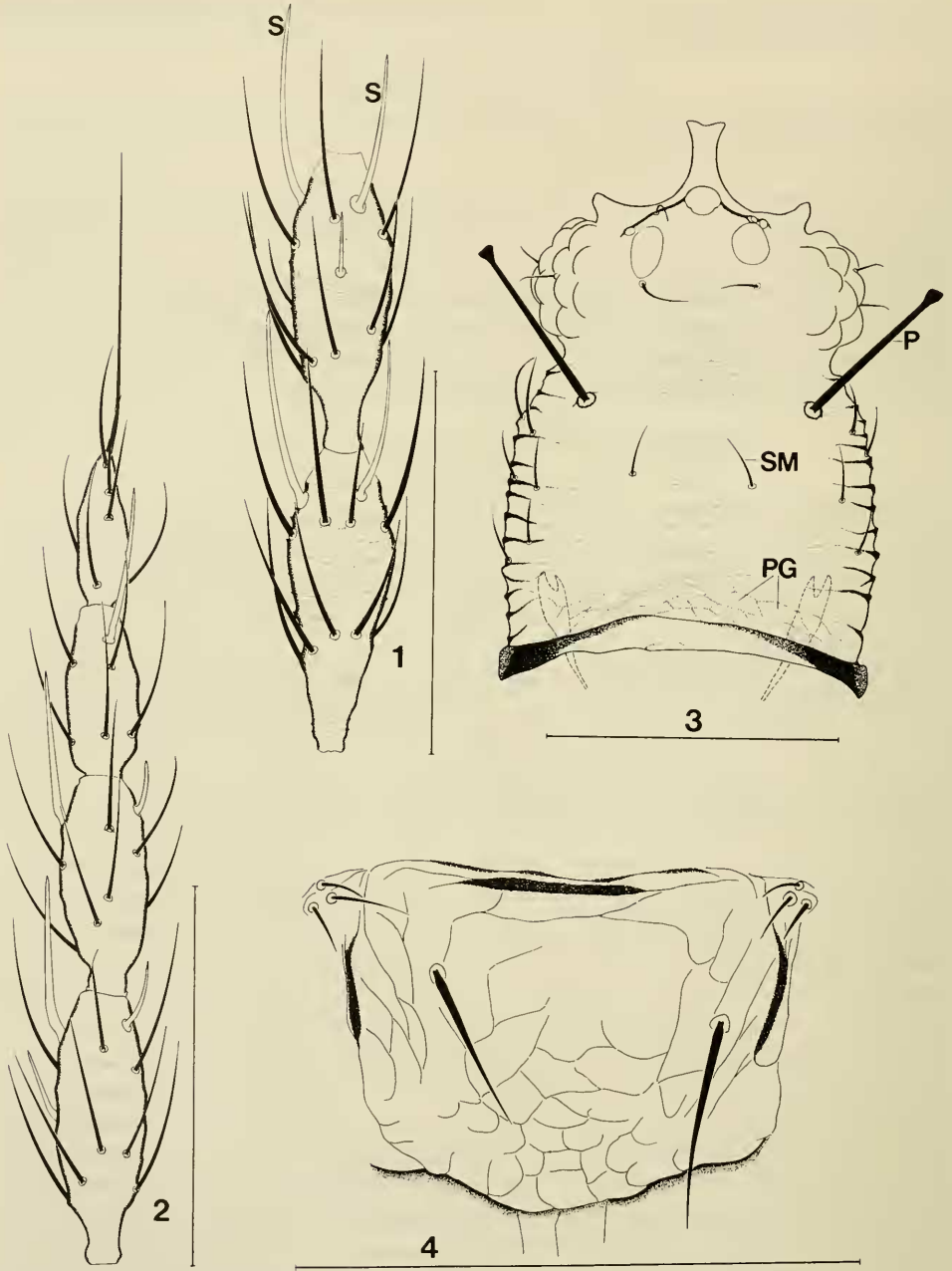
Figs. 1–7

The following description is of the holotype unless stated otherwise. *Terthrothrips marginatus* may be separated from other species in the genus by the prominent dark posterior margin of the metanotal pelta and relatively short antennal segments III and IV. This species is similar to *T. balteatus* and *T. bucculentus* but may be separated from them in the key.

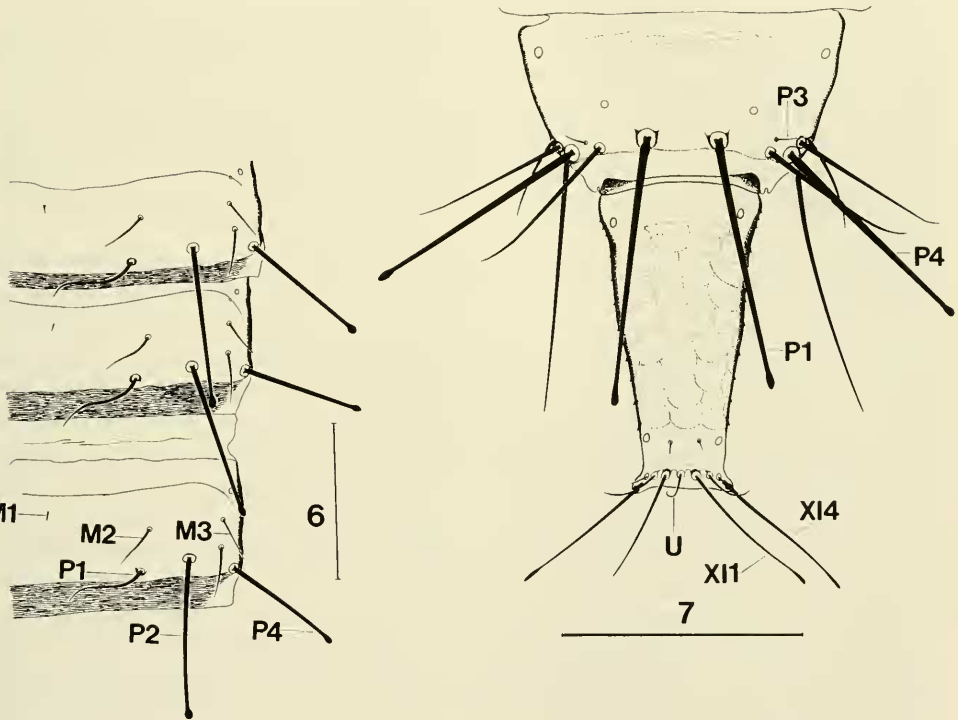
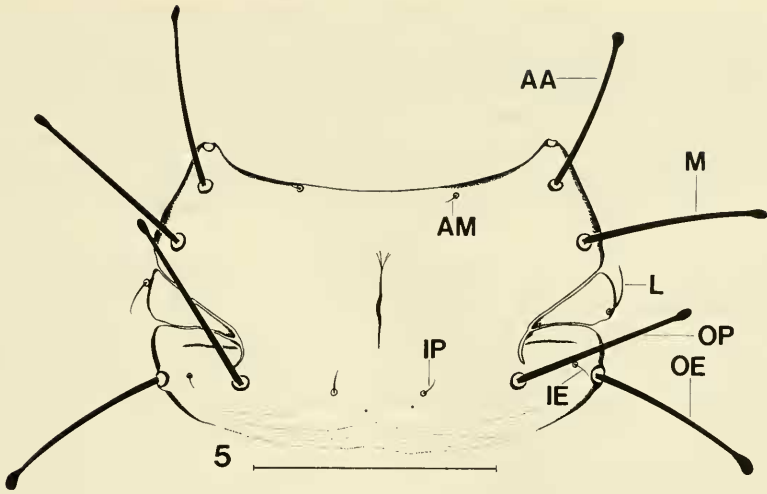
Antenna.—Segment VIII light yellow, almost clear; III–VII yellow-brown without sharp difference in shade between adjacent segments; I and II brown, darkest; VIII with pedicel narrower than medial width. Sense cones on distal $\frac{1}{3}$ of each segment (inner $\frac{1}{2}$, outer $\frac{1}{2}$): III, 1, 2; IV, 1, 2; V, 1, 2; VI, 1, 2; VII, 0, 1. Type series with 1–2 small cones on middle $\frac{1}{3}$ of IV–V. Setae (basal $\frac{1}{2}$, distal $\frac{1}{2}$): I, 5, 6; II, 7, 5; III, 6, 6; IV, 6, 6; V, 6, 5; VI, 7, 3–4; VII, 6–8, 5; VIII, 6, 8.

Head capsule.—Yellow-brown, darker medially than antennal segments I and II. One pair of submedial setae (SM) about $\frac{1}{2}$ of distance from posterior edge of eyes to posterior edge of capsule. About 24 small acute postocular setae; on each side 3 between major postocular seta (P) and edge of capsule in dorsal aspect; remainder on lateral and ventral sides. One pair of ventral major acute submedial setae about $\frac{1}{3}$ of distance from ventroposterior edge of capsule to eyes. About 10 well-demarcated polygons (PG) between SM and posterior edge of capsule. Four weak transverse striae between SM and posteromedial PG. About 5 weak transverse striae between SM and posterior edge of eyes. Posteromedial PG each with longer axis near transverse plane of head and usually 3–4× longer than short (longitudinal) axis. Capsular setae acute except P with enlarged tips. Each eye with 4–5 ommatidia along lateral edge in dorsal aspect; with 1 ommatidial seta on dorsal $\frac{1}{2}$, 2 on ventral $\frac{1}{2}$. Each cheek with about 15 short protuberances, warty or slightly sharp, along lateral edge in dorsal aspect. Dorsal occipital margin with a few weak striae in medial $\frac{1}{3}$. Maxillary stylets inserted $\frac{1}{3}$ of distance from dorsoposterior edge of capsule to P. Ocellar setae: 1 pair just posterior to hind ocelli, 1 pair on ridges proceeding posterolaterally from fore ocellus; both pairs acute, small. Distance between hind ocelli about $1\frac{1}{2}$ –2× width of either ocellus.

Prothorax.—Yellow-brown. Four pairs of long setae with expanded apices: anteroangular pronotals (AA), midlateral pronotals (M), outer epimerals (OE), outer posteromarginal pronotals (OP). Four pairs of much smaller acute setae:



Figs. 1-4. Holotype of *Terthrotripsis marginatus*. 1, Antennal segments III-IV. 2, Antennal segments V-VIII. 3, Head capsule, dorsal aspect. 4, Metanotal pelta. Setae: P = postocular; SM = submedial. PG = polygons. S = sense cone. Each scale line = 100 μ .



Figs. 5-7. Holotype of *Terthrothrips marginatus*. 5, Dorsal prothoracic plates. 6, Right portion of abdominal terga III-V. 7, Abdominal segments IX-XI, dorsal aspect. Setae: AA = anteroangular pronotal; AM = anteromarginal pronotal; IE = inner epimeral; IP = inner posteromarginal pronotal; M = midlateral; OE = outer epimeral; OP = outer posteromarginal pronotal; L = minor lateral; M1, M2, M3 = 1st through 3rd medial; P1, P2, P3, P4 = 1st through 4th posterior; U = unpaired of segment XI; X11, X14 = 1st and 4th paired of segment XI. Each scale line = 100 μ .

anteromarginal pronotals (AM), minor laterals (L), inner epimerals (IE), inner posteromarginal pronotals (IP). One pair of minute clear areas posteromedial to IP. Some specimens with L inserted just lateral to plate. Praepectus with prominent dark striae and complete medial division. Probasisternum with complete medial division, striae less prominent than on praepectus; each $\frac{1}{2}$ with 2 acute short setae near anterior edge and with posteromedial notch. Prospinasternum without setae or prominent striae, with narrowed posterior extension dorsally overlapping mesopraesternum.

Mesothorax.—Yellow-brown. Mesopraesternum thinner medially, with striae over entire surface, 1 minute lateral and 1 minute submedial pair of acute setae. Mesonotum roughly triangular with anterior projection inserted ventrally to pronotum, posterior margin darker, faint anastomosing striae on anterior $\frac{2}{3}$, light Y-shaped area at middle of posterior margin. Mesonotal setae: posterior margin with longest pair nearest Y-shaped area, thinner pair lateral to longest, 2 shortest pairs near lateral angles of mesonotum, all acute. Two pairs of light maculae anterior and slightly lateral to thinner pair and within striated $\frac{2}{3}$. Holotype with additional seta at right lateral angle of mesonotum.

Metathorax.—Yellow-brown. Metanotal pelta roughly quadrate with central pair of setae acute; about 10 well-demarcated PG posteromedial to central setae, more quadrate than dorsal posteromedial PG of head capsule; obliquely-oriented striae lateral and posterior to central setae; each anteromarginal corner with 3 minute acute setae in close triangular pattern; 3 striae extending posteriorly from middle $\frac{1}{3}$ of posterior margin; dark transverse margins lateral to 3 posteromedial striae and lateral to central setae. Metanotum posterior and lateral to pelta smooth; extreme lateral areas obscured by wings.

Wings.—Type series completely brachypterous. Fore wing with 1 basal short acute and 3 more distal long enlarged setae near costal edge. Hind wings obscured.

Fore leg.—Coxa with 1 major enlarged seta, 1 small acute seta dorsomedial to major seta, 3 small acute setae anteroventral to major seta. Tibia and tarsus generally yellow-brown, femur more brownish than tibia; coxa brown; trochanter yellow. Femur with about 20 well-demarcated transverse striae on both ventral and dorsal surfaces; about 32 dorsal and 24 ventral short acute setae, straight to slightly curved. Tibia with poorly-demarcated transverse striae; about 30 dorsal and 24 ventral short acute setae, setae on distal $\frac{1}{2}$ longer than on basal $\frac{1}{2}$. Tarsus with about 8 acute setae on both dorsal and ventral surfaces, including short thicker seta basal to inner acutely-rounded spur.

Middle and hind legs.—Generally yellow-brown, femur slightly darker than tibia. Setae acute: middle leg with about 40 femoral, fewer on inner than outer side, 50 tibial, 10 tarsal; hind leg with about 30 femoral, fewer on inner than outer side, 60 tibial, 10 tarsal. About 15 dorsal femoral striae, tibial striae more prominent than on fore tibia.

Abdominal color.—Segment II yellow, almost as light as antennal segment VIII; III yellow anteriorly, brown posteriorly; IV–V dark yellow-brown; VI–IX lighter than V; X generally yellow-brown, lighter along basal margin and in distal $\frac{1}{2}$.

Abdominal terga I–VII.—Pelta of I: anterior extension roughly quadrate with random pattern of weak striae; base with weak striae more closely spaced; lateral wings small, generally smooth. Setae of I: 1 sublateral short acute pair, 1 lateral long pair with enlarged apices, 1 short acute pair just anterior to enlarged setae.

Setae of II: longest pair enlarged at apices, posterolateral; second longest pair acute, lateral to longest; 3 short acute pairs, anterolateral to longest, anterior to longest, and submedial. Pattern shared by III–VII: P2 and P4 long with enlarged apices; P3 short, acute, anteromedial to P4; M1 submedial, short, acute; M3 short, acute, anterior to P3. Weak sparse striation on II–VII. Anterior margin of III–VII: no setae, 1 pair of lateral pores. Wing-holding setae: P1 with greatest curvature on IV–VI, barely sigmoid on III; M2 barely curved on III–IV, slightly sigmoid on V–VI.

Abdominal terga VIII–IX.—Setal pattern different from III–VII. Posterior $\frac{1}{3}$ of VIII: P1 slightly curved, blunt; P2–P3 shorter, acute; P2 posterior to line connecting P1 and P4; P3 just medial to P4; P4 long, with enlarged apex. Middle $\frac{1}{3}$ of VIII: M1 shortest, acute, submedial; 1 minute pair of light spots between M1; 1 pair of pores anterior to M1. Anterior $\frac{1}{3}$ of VIII: no setae, 1 pair of lateral pores, weak sparse striation. Posterior $\frac{1}{3}$ of IX: P1 and P4 long, with enlarged apex; P2 $\frac{2}{3}$ as long as P4, acute; P3 shortest, acute, anterolateral to P2. 1 pair of sublateral pores anterior to setae. No setae on anterior $\frac{2}{3}$. Anterior $\frac{1}{3}$ of IX: 1 pair of lateral pores, weak sparse striation.

Segments X–XI.—Setae of X: 1 minute acute pair between dorsal posterolateral pores, 1 minute acute ventroposterior pair. X: 1 dorsal anterolateral pair of pores; 9 longitudinal rows of scales, about 8 scales/row. Setae of XI: 1 unpaired medi-odorsal (U) and 9 pairs (XI1–XI9); U short, highly curved, acute; XI1, XI4, XI6, longest, slightly enlarged apices; XI2, XI5, XI8–9, highly curved, acute, shorter than XI1, XI4, XI6; XI3 and XI7 shortest, acute.

Measurements of holotype (allotype).—L = length, W = width. Measurements are in microns. Antennal segments: L of I, 47(41); W of I, 38(33); L of II, 58(53); W of II, 32(25); L of III, 82(70); W of III, 28(25); L of IV, 78(68); W of IV, 26(23); L of V, 74(64); W of V, 25(22); L of VI, 58(53); W of VI, 23(20); L of VII, 46(40); W of VII, 20(18); L of VIII, 43(37); W of VIII, 14(12). Head capsule: L, 199(177); frontal W, 77(68); ocular W, 117(101); postocular W, 94(88); cheek W, 129(115); subbasal W, 122(108); basal W, 129(113); postocular seta, 70(51). Prothoracic W: 207(188). Prothoracic setae: AA, 77(55); M, 83(65); OE, 83(63); OP, 82(69). Fore wing L distal to subbasal setae: 33(26). Abdominal segments: W of IV, 321(217); L of X, 129(95); basal W of X, 69(56); distal W of X, 33(29); seta IXP1, 114(78); seta IXP4, 102.

Measurements of type series.—Measurements include holotype and allotype and are stated as follows: mean \pm standard deviation, N = number of specimens measured. Females are first, males are in parentheses. Antennal segments: L of III, 81.5 ± 2.50 , N9 (73.0 ± 3.58 , N7); W of III, 26.8 ± 0.91 , N9 (24.5 ± 0.56 , N7); L of IV, 75.8 ± 2.19 , N8 (68.5 ± 3.32 , N7); W of IV, 26.5 ± 0.77 , N8 (23.9 ± 0.47 , N7). Head capsule: L, 198.0 ± 6.26 , N9 (179.9 ± 3.48 , N7); frontal W, 75.2 ± 2.06 , N9 (68.6 ± 1.54 , N7); ocular W, 118.0 ± 2.92 , N9 (104.0 ± 2.38 , N7); postocular W, 97.2 ± 2.02 , N9 (85.3 ± 2.16 , N7); cheek W, 131.9 ± 3.52 , N9 (116.0 ± 3.65 , N7); subbasal W, 123.6 ± 5.41 , N9 (109.9 ± 4.81 , N7); basal W, 130.8 ± 5.74 , N9 (116.0 ± 4.24 , N7). Pronotal W, 211.9 ± 11.57 , N8 (195.0 ± 7.72 , N6). Fore wing L distal to major subbasal setae, 25.2 ± 5.55 , N9 (26.7 ± 5.96 , N7). Abdominal segments: W of IV, 320.4 ± 16.46 , N9 (219.0 ± 17.76 , N7); L of X, 121.6 ± 4.77 , N9 (98.3 ± 3.27 , N7); basal W of X, 67.4 ± 1.50 , N9 (57.0 ± 1.07 , N7); distal W of X, 33.1 ± 0.93 , N9 (29.4 ± 0.45 , N7).

Male glandular areas.—Abdominal segment VIII of all ♂ paratypes with glandular area having straight anterior and posterior borders, occupying complete width of VIII, and ending within about 20 μ of anterior and posterior edges of sternite.

Types and type locality.—♀ (holotype), ♂ (allotype), 8 ♀ and 6 ♂ (paratypes). Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, Fritz Plaumann coll. All deposited in Illinois Natural History Survey, Champaign, except for 1 ♀ paratype deposited in Senckenberg Museum, Frankfurt-am-Main, West Germany.

Etymology.—From Latin *marginatus* = margined, in reference to dark cuticular posterior margins of metanotal pelta (Fig. 4).

Terthrothrips peltatus Hood

Terthrothrips peltatus Hood, 1957: 146–147; Mound, 1976: 32, 62; Mound, 1977: 237–238, 242.

New record.—Brazil, Santa Catarina, Seara, 27°09'S, 52°15'W, January 1960, 2 mac ♀, 9 br ♀, 6 br ♂.

This species displayed intermediate wing lengths between the completely fringed macropterous and approximately 100 μ -long brachypterous forms at both sites. Hood (1957) referred to some intermediate wing lengths as micropterous, but the almost continuous gradient in wing lengths for specimens in this tribe led me to refer to all forms with less than fully-developed wings as brachypterous. For example, the 9 brachypterous females of *T. peltatus* from Seara had the following mean \pm standard deviation for the fore wing length distal to the major subbasal setae: 124.4 \pm 66.16. This may be compared to the smaller deviation in the brachypterous females of *T. marginatus*.

LITERATURE CITED

- Bergroth, E. 1896. Nouvelle espèce de Thysanoptères. Ann. Soc. Entomol. Belg. 40: 66–67.
- Hinds, W. E. 1902. Contribution to a monograph of the insects of the order Thysanoptera inhabiting North America. Proc. U.S. Nat. Mus. 26: 79–242.
- Hood, J. D. 1935. Some new or little-known Thysanoptera of the family Phlaeothripidae. Rev. Entomol. (Rio de J.) 5: 159–199.
- . 1950. Brazilian Thysanoptera. II. Rev. Entomol. (Rio de J.) 21: 1–113.
- . 1952. Brazilian Thysanoptera. III. Proc. Biol. Soc. Wash. 65: 141–176.
- . 1954. Brazilian Thysanoptera. IV. Proc. Biol. Soc. Wash. 67: 17–54.
- . 1957. New Brazilian Thysanoptera. Proc. Biol. Soc. Wash. 70: 129–180.
- . 1960. Six new Thysanoptera from Brazil. Rev. Bras. Entomol. 9: 57–68.
- Karny, H. H. 1925. Über *Phloeothrips sanguinolentus* Bergroth nebst einer revision der Dicerathripinen-Genera. Not. Entomol. 5: 77–84.
- Mound, L. A. 1976. American leaf-litter Thysanoptera of the genera *Erkosothrips*, *Eurythrips* and *Terthrothrips* (Phlaeothripidae: Phlaeothripinae). Bull. Br. Mus. (Nat. Hist.) Entomol. 35: 25–64.
- . 1977. Species diversity and the systematics of some New World leaf litter Thysanoptera (Phlaeothripinae; Glyptothripini). Syst. Entomol. 2: 225–244.
- Stannard, L. J., Jr. 1955. On some reticulate-headed genera of the tribe Glyptothripini Priesner (Thysanoptera: Phlaeothripidae). Trans. Am. Entomol. Soc. 81: 77–101.
- . 1957. The phylogeny and classification of the North American genera of the suborder Tubulifera (Thysanoptera). Ill. Biol. Monogr.: Number 25. 200 pp.